

Coal-Fired Power Plants using Once-Through Cooling with Endangered Species Impacts

Plant Name	State	Water Body	Fuel Type	Daily Intake Capacity (mill. of gallons)	Threatened or endangered species living in water body	Records of power plant affecting endangered species
Crystal River 1-3	Florida	Gulf of Mexico	Coal/ Nuclear	2,167.9	Protected species of dolphins (Atlantic spotted, Risso's, and bottlenose) Endangered Fish (ex. Alabama shad, salt marsh topminnow, and mangrove rivulus) Endangered Sea Turtles (ex. Loggerhead, hawksbill) Threatened Sea Turtles (Kemp's ridley, green, leatherback)	The Crystal River Plant's water intake structures have impinged at least five species of threatened or endangered sea turtles – loggerhead, green, Kemp's ridley, leatherback, and hawksbill
Big Bend	Florida	Gulf of Mexico	Coal	1,395.4	Protected species of dolphins (Atlantic spotted, Risso's, and bottlenose) Endangered Fish (ex. Alabama shad, salt marsh topminnow, and mangrove rivulus) Endangered Sea Turtles (ex. Loggerhead, hawksbill) Threatened Sea Turtles (Kemp's ridley, green, leatherback)	From 1976 to 1977 the annual impingement was estimated at over a quarter of a million fish. ¹ Between 1976 to 1977 the plant killed an estimated 68 billion bay anchovy (the bay anchovy is not endangered).
Lansing Smith	Florida	Gulf of Mexico	Coal	273.9	Protected species of dolphins (Atlantic spotted, Risso's, and bottlenose) Endangered Fish (ex. Alabama shad, salt marsh topminnow, and mangrove rivulus) Endangered Sea Turtles (Loggerhead, hawksbill) Threatened Sea Turtles (Kemp's	

					ridley, green, leatherback)	
Jack Watson	Mississippi	Gulf of Mexico	Coal	125.3	Protected species of dolphins (Atlantic spotted, Risso's, and bottlenose) Endangered Fish (ex. Alabama shad, salt marsh topminnow, and mangrove rivulus) Endangered Sea Turtles (ex. Loggerhead, hawksbill) Threatened Sea Turtles (Kemp's ridley, green, leatherback)	
Danskammer	New York	Hudson River	Coal	457	Endangered Fish (Shortnose Sturgeon)	In certain years, power plants along the Hudson River (including but not limited to Dansmakker) have entrained between 33 and 79 percent of the eggs and larvae spawned by striped bass, American shad, Atlantic tomcod, and 5 other important species. ² The ecology of the Hudson River has also changed since the plants have been in existence, with many fish species in decline and populations becoming less stable. ³
Chesapeake	Virginia	Chesapeake Bay	Coal	513.6	Endangered Species (peregrine Falcon, loggerhead turtle, Atlantic ridley turtle, Shortnose Sturgeon)	
Chesterfield	Virginia	Chesapeake Bay	Coal	845.6		
Morgantown	Maryland	Chesapeake Bay	Coal	1,441.8		
Potomac River	Virginia	Chesapeake Bay	Coal	450.3		
Allen Steam Plant	Tennessee	Mississippi River	Coal	496.8		
Alma	Wisconsin	Mississippi River	Coal	181.5	Endangered species (Skipjack herring, Bluntnose darter, Goldeye, Black redhorse, etc.) Threatened species (Numerous	

					fish)	
Big Cajun	Louisiana	Mississippi River	Coal	361.8		
Genoa	Wisconsin	Mississippi River	Coal	244.2	Endangered species (Skipjack herring, Bluntnose darter, Goldeye, Black redhorse, etc.) Threatened species (Numerous fish)	
John P. Madgett	Wisconsin	Mississippi River	Coal	322.4	Endangered species (Skipjack herring, Bluntnose darter, Goldeye, Black redhorse, etc.) Threatened species (Numerous fish)	
Lansing	Iowa	Mississippi River	Coal	330.8	Endangered Species (Topeka Shiner, Higgins eye pearlymussel, sheepnose mussel, Spetaclecase mussel, Pallid Sturgeon, etc.)	
Meramec	Missouri	Mississippi River	Coal	675.1	Endangered Fish (Pallid sturgeon, Topeka shiner)	
Milton L Kapp	Iowa	Mississippi River	Coal	175.1	Endangered Species (Topeka Shiner, Higgins eye pearlymussel, sheepnose mussel, Spetaclecase mussel, Pallid Sturgeon, etc.)	
Muscatine Plant #1	Iowa	Mississippi River	Coal	301	Endangered Species (Topeka Shiner, Higgins eye pearlymussel, sheepnose mussel, Spetaclecase mussel, Pallid Sturgeon, etc.)	
Nelson Dewey	Wisconsin	Mississippi River	Coal	143.9	Endangered species (Skipjack herring, Bluntnose darter, Goldeye, Black redhorse, etc.) Threatened species (Numerous fish)	
New Madrid	Missouri	Mississippi River	Coal	956.1		
Nine Mile Point	Louisiana	Mississippi River	Coal	1,497.4		
Riverside	Iowa	Mississippi	Coal	246.7	Endangered Species (Topeka	

		River			Shiner, Higgins eye pearlymussel, sheepnose mussel, Spetaclecase mussel, Pallid Sturgeon, etc.)	
Riverside	Minnesota	Mississippi River	Coal	277.1		
Rush Island	Missouri	Mississippi River	Coal	863.1	Endangered Fish (Pallid sturgeon, Topeka shiner)	
Sioux	Missouri	Mississippi River	Coal	705.4	Endangered Fish (Pallid sturgeon, Topeka shiner)	
Wood River	Illinois	Mississippi River	Coal	589.2		
Ashtabula	Ohio	Lake Erie	Coal	1,016.8	Endangered Species (Lake Erie water snake, sturgeon)	
Avon Lake	Ohio	Lake Erie	Coal	1,607.9	Endangered Species (Lake Erie water snake, sturgeon)	
Bay Shore	Ohio	Lake Erie	Coal	742.3		
Conners Creek	Michigan	Lake Erie	Coal	323		
Dunkirk	New York	Lake Erie	Coal	579		
Eastlake	Ohio	Lake Erie	Coal	1,158.3		
Edgewater	Wisconsin	Lake Erie	Coal	406.9		
J.R. Whiting	Michigan	Lake Erie	Coal	308.1		
Lake Shore	Ohio	Lake Erie	Coal	622.7		
Monroe	Michigan	Lake Erie	Coal	2,012.9		
River Rouge	Michigan	Lake Erie	Coal	647.9		
B.C. Cobb	Michigan	Lake Michigan	Coal	558.1		
Bailly	Indiana	Lake Michigan	Coal	442.5		
Crawford	Illinois	Lake Michigan	Coal	552.3		
Dean H. Mitchell	Indiana	Lake Michigan	Coal	746.1		
Fisk	Illinois	Lake Michigan	Coal	301.7		
J.H. Campbell	Michigan	Lake Michigan	Coal	886.3		

Michigan City	Indiana	Lake Michigan	Coal	229.9		
Pulliam	Wisconsin	Lake Michigan	Coal	564.6		
South Oak Creek	Wisconsin	Lake Michigan	Coal	1,136.9		
State Line	Indiana	Lake Michigan	Coal	605.9		
Trenton Channel	Michigan	Lake Michigan	Coal	515.5		
Waukegan	Illinois	Lake Michigan	Coal	852		
Will County	Illinois	Lake Michigan	Coal	1,292		
Belle River	Michigan	Lake Huron	Coal	949.6		
Dan E Karn	Michigan	Lake Huron	Coal	465.12		
Harbor Beach	Michigan	Lake Huron	Coal	129.2		
J.C. Weadock	Michigan	Lake Huron	Coal	344.9		
Marysville	Michigan	Lake Huron	Coal	609.2		
St. Clair	Michigan	Lake Huron	Coal	1,343.7		
Huntley	New York	Lake Ontario	Coal	846		
Presque Isle	Michigan	Lake Superior	Coal	415.4		
Bridgeport Harbor	Connecticut	Long Island Sound	Coal/Oil	541		

¹ § 316(b) Case Studies, Part D: The Tampa Bay Watershed Case, Table D3-2, found at <http://water.epa.gov/lawsregs/lawsguidance/cqa/316b/phase2/upload/chd1.pdf> (last visited May 16, 2011)

² NYSDEC, New York State Water Quality Report 2006 (Published 2007).

³ PISCES Conservation, Ltd., *The Status of Fish Populations and the Ecology of the Hudson* (April 2008) at 37-38; *see also* PISCES Conservation, Ltd., *Entrainment, Impingement, and Thermal Impacts at Indian Point Nuclear Power Station* (November 2007) at 43-44.